

CLAIMS

1. A cassette for use in freezing a liquid contained in a plurality of liquid receptacles (25), said freezing comprising inserting the cassette (6) with the liquid receptacles (25) into a freezing tunnel (5) having a streaming cooling medium and keeping them therein until the liquid in all the liquid receptacles (25) in the cassette (6) is frozen,

characterised by

a bottom plate (12) for supporting a number of the liquid receptacles (25) in
10 a layer,

a number of intermediate plates (15) having essentially the same dimensions as the bottom plate (12) for placing on a layer of liquid receptacles (25) and supporting a further layer of liquid receptacles (25), and

15 two opposite side walls (13, 14) being rigidly connected to the bottom plate (12) for constituting a U-form therewith, so that each intermediate plate (15) when placed on a layer of liquid receptacles (25) will be fixed laterally in relation to the side walls (13, 14).

2. A cassette as claimed in claim 1, wherein each intermediate plate (15) has means (16) cooperating with the side walls (13, 14) so that each intermediate plate (15) when placed on a layer of liquid receptacles (25) will be fixed lengthwise in relation to the side walls (13, 14).

3. A cassette as claimed in claim 2, wherein the liquid receptacles (25) are flexible and each intermediate plate (15) has spacer means (16, 26) determining the distance to the subjacent intermediate plate (15) and the bottom plate (15),
25 respectively.

4. A cassette as claimed in any one of claims 1-3, wherein each intermediate plate (15) and the bottom plate (12) have a number of full length ducts extending in the plane of the plate for admitting the streaming of the cooling medium through them and thereby a cooling of the bottom plate (12) and the intermediate plates (15), when the cassette (6) is inserted in the freezing tunnel (5).

30 5. A freezer for freezing a liquid contained in a plurality of liquid receptacles (25), said freezer comprising a cassette (6) for supporting the liquid receptacles (25) and a freezing tunnel (5) for a streaming cooling medium, the cassette (6)

with the liquid receptacles (25) being insertable into the freezing tunnel (5) and kept therein until the liquid in all the liquid receptacles (25) in the cassette (6) is frozen,

characterised in

5 that the cassette (6) comprises a bottom plate (12) for supporting a number of liquid receptacles (25) in a layer and a number of intermediate plates (15) having substantially the same dimensions as the bottom plate (12) for being placed each on a separate layer of liquid receptacles (25) and each supporting a further layer of liquid receptacles (25),

10 that a cassette holder (11; 30) is provided having a frame (23) for supporting the cassette (6) and a number of intermediate plates (15) separated from the cassette (6), and

15 that the cassette holder (11; 30) is mobile for movement from a station for loading of the cassette (6) with the liquid receptacles (25) and the intermediate plates (15) to the freezing tunnel (5) for inserting the loaded cassette (6) therein.

6. A freezer as claimed in claim 5, wherein the cassette holder (11; 30) has a stand (20-22; 32) for placing the intermediate plates (15) in a sloping or substantially vertical position in contact with each other and successively displaced in height.

20 7. A freezer as claimed in claim 6, wherein the frame (23) of the cassette holder (11) is equipped with wheels (24).

25 8. A freezer as claimed in claim 5, further comprising a lifting equipment (31) for raising and lowering the cassette (6) on the cassette holder (30) such that the intermediate plates (15) may be loaded and unloaded at substantially the same height.

9. A freezer as claimed in any one of claims 5, wherein the cooling medium of the freezing tunnel (5) is air.

10. A freezer as claimed in claim 6, wherein the stand for placing the intermediate plates (15) is releasable from the frame of the cassette holder.